hg

UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,596	04/30/2001	Robert Miller	IBM/177	3237

7590 01/27/2005	EXAMINER

Scott A. Stinebruner
Wood, Herron & Evans, L.L.P.
2700 Carew Tower
441 Vine Street
Cincinnati, OH 45202-2917

NANO, SARGON N

ART UNIT	PAPER NUMBER
2157	

DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/845,596	MILLER ET AL.
	Examiner	Art Unit	
	Sargon N Nano	2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _01 October 2004_.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-27_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-27_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to the amendment received on Oct. 1, 2004. Claims 1 –

27 are pending examination.

2.   *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

Claim 24 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention.

Claim 24 recites the limitation " method" in line 1. There is insufficient

antecedent basis for this limitation.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the

United States before the invention thereof by the applicant for patent, or on an international application

by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this

title before the invention thereof by the applicant for patent.

3.   Claim 1- 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Porter

et al., Patent No. 6,636,597.

As to claim 1, Porter teaches a method of accessing a group in a clustered computer system, wherein the clustered computer system includes a plurality of nodes, and wherein the group includes a plurality of members resident respectively on the plurality of nodes, the method comprising:

(a) receiving an access request on a first node in the plurality of nodes, wherein the access request identifies a cluster-private group name associated with the group; and

(b) processing the access request on the first node to initiate a group operation on at least a subset of the plurality of nodes that map to the cluster-private group name (see col.4, lines 29 – 48).

As to claim 2, Porter teaches the method further comprising generating the access request with a user job resident on the first node (see col.4, lines 29 – 48).

As to claim 3, Porter teaches the method further comprising forwarding the access request to a clustering infrastructure resident in the first node via a call from the user job (see col.4, lines 29 – 48).

As to claim 4, Porter teaches the method further comprising:

(a) generating the access request with a user job resident on a second node in the plurality of nodes; and

(b) processing the access request with a proxy job resident on the second node by communicating the access request to the first node (see col.5, lines 40 – 49).

As to claim 5, Porter claims the method wherein the proxy job is a member of a

cluster control group, the method further comprising:

(a) forwarding the access request from the user job to the proxy job ;

and

(b) forwarding the access request from the proxy job to a clustering

infrastructure resident in the second node via a call from the proxy job (see

col.3, lines 1 – 8)

As to claim 6, Porter teaches the method further comprising retrieving the cluster-

private group name with a user job by accessing a cluster-private data structure (see

col.7, lines 47 – 58).

As to claim 7, porter teaches the method wherein the cluster-private data

structure is resident on the same node as the user job (see col.7, lines 47 – 58).

As to claim 8, Porter teaches the method wherein the cluster-private data

structure is accessible only from the node upon which the cluster-private data structure

is resident (see col.7, lines 47 – 58).

As to claim 9, Porter teaches the method wherein the cluster-private data

structure is accessible only by jobs that are resident on the node upon which the

cluster-private data structure is resident. (see col.3, lines 52 – 60).

As to claim 10, Porter teaches the method   wherein initiating the group operation

comprises distributing messages to a plurality of group members resident on the nodes

that map to the cluster-private group name. (see col.7, lines 31 – 40).

As to claim 11, Porter teaches the method wherein initiating the group operation further comprises accessing a group address data structure to retrieve a plurality of network addresses associated with the cluster-private group name, wherein distributing messages to the plurality of group members includes sending a message to each of the plurality of network addresses (see col.2, lines 60 – 67 and col.3, lines 1-8).

As to claim 12, Porter teaches the method wherein initiating the group operation is performed by a clustering infrastructure resident on the first node . (see col.4, lines 49 – 59).

As to claim 13, Porter teaches the method wherein initiating the group operation includes retrieving with the clustering infrastructure plurality of addresses that are mapped to the cluster-private group name in a data structure that is local to the clustering infrastructure (see col.3, lines 33 – 42).

As to claim 14, Porter teaches the method wherein initiating the group operation includes locally resolving on the first node a mapping between the cluster-private group name and a plurality of addresses associated with at least the subset of the plurality of nodes (see col.3, lines 52 – 63).

As to claim 15, Porter teaches an apparatus comprising:

(a) a memory accessible by a first node among a plurality of nodes in a clustered computer system ; and

(b) a program resident in the memory and executed by the first node, the program configured to access a group that includes a plurality of members resident respectively on the plurality of nodes by receiving an access request

that identifies a cluster-private group name associated with the group, and

processing the access request to initiate a group operation on at least a subset

of the plurality of nodes that map to the cluster-private group name (see col.4,

lines 29 – 48).

As to claim 16, Porter teaches the apparatus further comprising a user job

configured to generate the access request (see col.4, lines 29 – 48).

As to claim 17, Porter teaches the apparatus wherein the program comprises a

clustering infrastructure resident on the first node (see col.4, lines 29 – 48).

As to claim18, Porter teaches the apparatus further comprising a proxy job

configured to forward the access request from the user job to the clustering

infrastructure (see col.3, lines 1 – 8).

As to claim 19, Porter teaches the apparatus further comprising:

   (a) a cluster-private data structure configured to store the cluster-

private group name; and

   (b) a user job configured to access the cluster-private data structure to

retrieve the cluster-private group name and generate the access request

therefrom (see col.3, lines 16 – 22 and col.6, lines 55 – 65).

As to claim 20 Porter teaches the apparatus wherein the cluster-private data

structure is resident on the same node as the user job (see col.7, lines 47 – 58).

   As to claim 21 Porter teaches the apparatus wherein the cluster-private

data structure is accessible only from the node upon which the cluster-private data

structure is resident (see col.3, lines 52 – 60).

As to claim 22, the apparatus further comprising a group address data structure configured to store a plurality of network addresses associated with the cluster-private group name, wherein the program is configured to initiate the group operation by accessing the group address data structure to retrieve the plurality of network addresses and sending a message to each of the plurality of network addresses (see col.2, lines 60 – 67 and col.3, lines 1-8).

As to claim 23, Porter teaches the apparatus wherein the program comprises a clustering infrastructure, and wherein the group address data structure is local to the clustering infrastructure (see col.4, lines 29 – 44).

As to claim 24, Porter teaches the method wherein the program is further configured to process the access request by locally resolving on the first node a mapping between the cluster-private group name and a plurality of addresses associated with at least the subset of the plurality of nodes (see col.4, lines 29 – 44).

As to claim 25, porter teaches a clustered computer system, comprising:

(a) a plurality of nodes coupled to one another over a network;

(b) a group including a plurality of members resident respectively on the plurality of nodes; and

(c) a program resident in a first node among the plurality of nodes and configured to access the group by receiving an access request that identifies a cluster-private group name associated with the group, and processing the access request to initiate a group operation on at least a subset of the plurality of nodes that map to the cluster-private group name (see col.4, lines 29 – 48).

As to claim 26 porter teaches a program product, comprising:

(a) a program resident in the memory and executed by a first node

among a plurality of nodes in a clustered computer system, the program

configured to access a group that includes a plurality of members resident

respectively on the plurality of nodes by receiving an access request that

identifies a cluster-private group name associated with the group, and

processing the access request to initiate a group operation on at least a subset

of the plurality of nodes that map to the cluster-private group name; and

(b) a signal bearing medium bearing the program (see col.4, lines

29 – 48).

As to claim 27, porter teaches the program product wherein the signal bearing

medium includes at least one of a transmission medium and a recordable medium. (

see col.3).

Response to Arguments

4.   Applicant's arguments have been fully considered but they are not persuasive.

In the remarks, the applicant argue that; A) Porter et al does not disclose the use

of a cluster.

In response to A) Porter teaches a system for providing services in a

communications network includes a service processing function, a universal directory

function, and a nodal resource manager (see abstract). Porter teaches a system that

includes a nodal resource manager which serves as a gatekeeper to all of the resources

belonging to a particular domain. The resources of the domain managed by nodal

resource manager are tracked in a nodal resource database and are allocated in

response to user requests (see col. 4 lines 49 – 64). A resource request is composed of

a number of parameters which nodal resource manager uses to select a set of

candidate resources (see col. 5 lines 51 – 60) According to Microsoft Computer

Dictionary the definition of a cluster is as follows: a group of independent network

servers that operate and appear to clients as if they were single unit. A cluster is

designed to improve network capacity by, among other things, enabling the servers

within a cluster to shift work over for another, a cluster network also enhances stability

and minimizes or eliminates downtime caused by application or system failure. A quick

glance at fig.1 shows a group of nodes that are managed by a single network resource

manager that receives and processes requests by users where the manager could

assign a request to a single node or multiple nodes transparently to the user (see col. 5

lines 40-45). Therefore Porter meets the scope of the claimed limitation "a private

cluster".

5.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

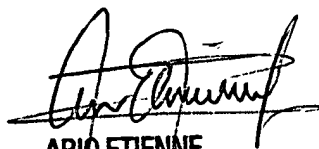shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

6.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Sargon N Nano whose telephone number is (703) 305-

4651. The examiner can normally be reached on 8 hour.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ario Etienne can be reached on (703) 308- 7562. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Sargon Nano
Examiner Art Unit 2157

ARIO ETIENNE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100